

The circle of life continues Savannas

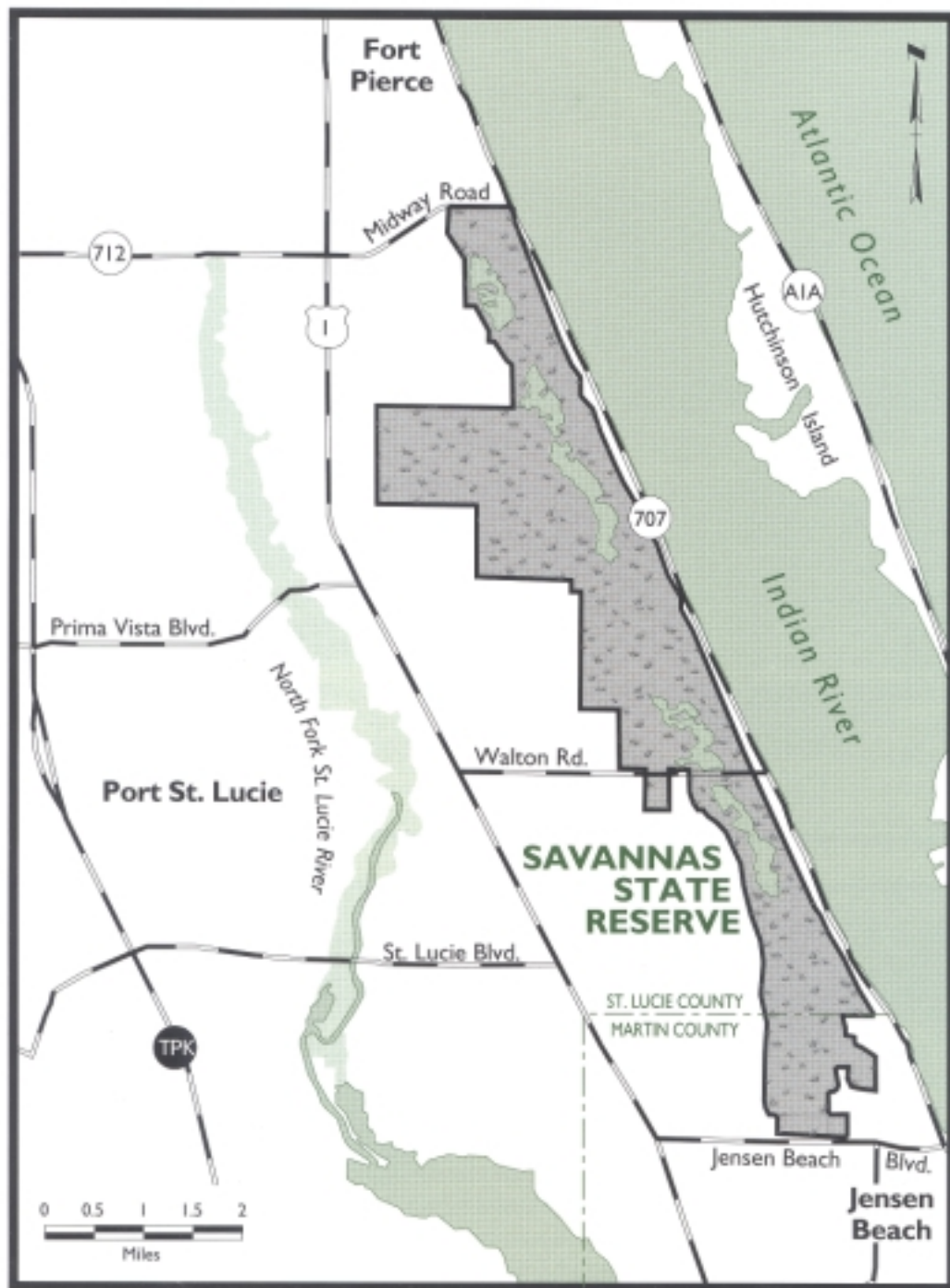
BY JAN P. LOFTIN

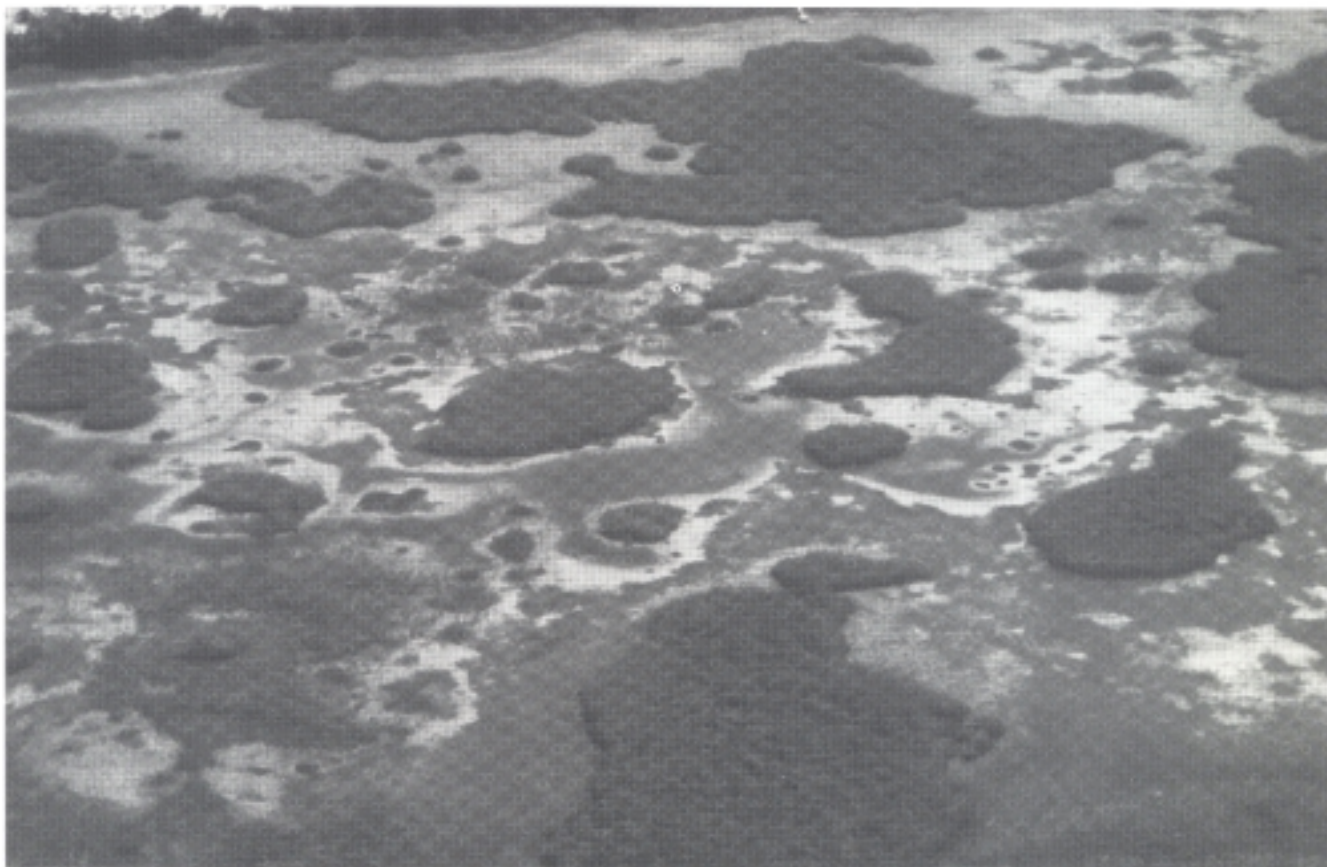
The great Lion King, Mufasa, looks out over the golden African savanna and with pride (no pun intended) declares to his newborn son, Simba, "Where all the light shines, that is our kingdom." The great animals that are part of his domain bow in deference to the continued circle of

life that is and always has been the essence of the savannas. An animated Disney version of Africa, sure; but, in reality, just south of the equator, the rich tropical savannas of the East African Serengeti Plains support the greatest concentration of mixed plains wildlife in the world.

Like the impressive array of animals depicted in Mufasa's vast kingdom, the world's largest herds of elephant, rhinoceros, wildebeest, giraffe, zebra, buffalo, and antelope roam the African savannas of the east and south. The lions, leopards, cheetahs, hyenas, and jackals that prey upon them make up more than one million carnivores who share the plains with numerous species of birds, rodents, and insects. All these creatures, great and small, orchestrate their stealth movements across the grassy prairie in rhythm with the dry and wet seasons.

But if this exotic and distant land seems out of reach, look 30 degrees of latitude to the north of tropical Africa in sub-tropical Florida where we have our own savanna. Overlapping St. Lucie and Martin counties, the Savannas State Reserve contains 5,000 acres and stretches 10 miles from Fort Pierce to Jensen Beach. Savannas are simply tropical and subtropical grasslands that occupy vast areas on every continent in the trade-wind belt. The Florida Savannas, like most, were formed by a combination of wind, waves, and time and





An aerial view of the Savannas — fragments of freshwater marshes once stretched along the entire east coast.

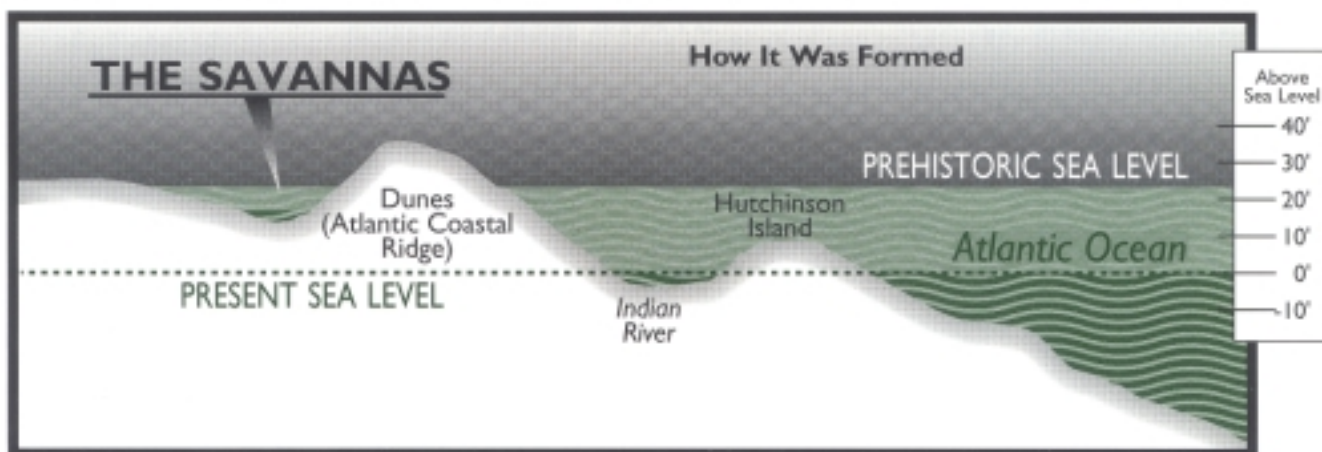
have, for centuries, created and recreated an ecosystem that supported its own circle of life.

Thousands of years ago, when the sea level was some 30 feet higher than it is now, Hutchinson Island (see illustration) was an off-shore sandbar. The sand ridge that separates the

Savannas from the Indian River was beach dune, and the Savannas was a river similar to the Indian River today. Over time, sea level receded down that sandy staircase, turning the sandbar into a barrier island, the ancient dune to a sand ridge (the Atlantic Coastal Ridge), and the old river to a marsh.

Rainfall turned the water in the wetlands from brackish to fresh. (The grasses of these marshes, once part of a long chain of freshwater marshes that stretched along the entire east coast of Florida, gave the first European settlers the appearance of a savanna ecosystem — hence the name.)

West of the sand ridge and the wetlands were vast expanses of pine and palmetto forests. This was the face of the savannas for thousands of years. Today, only fragments remain. The Savannas State Reserve contains the largest and most ecologically intact stretch of this Florida east coast



ecosystem. The Atlantic Coastal Ridge is the high ground on the eastern border of the Savannas State Reserve and the western

shore of the Indian River Lagoon.

In the late 1800s and early 1900s, the sandy ridge was covered with pineapple plantations

and Jensen Beach was known as the "pineapple capital of the world," exporting more than a million crates of the fruit annually. Pesky nematodes and worms ravaged the crop in

Like a sandy sink with a sluggish drain, the Savannas hold the rainwater, allowing it to percolate slowly through a hard layer below the sand called hardpan. The marsh is sensitive to fluctuation in water levels and as little as six inches could mean the difference between wet prairie and pine flatwoods. Some years, the marsh is a giant jigsaw puzzle of cracked mud. Other years, the flood waters run freely through the pine forest on the western side.

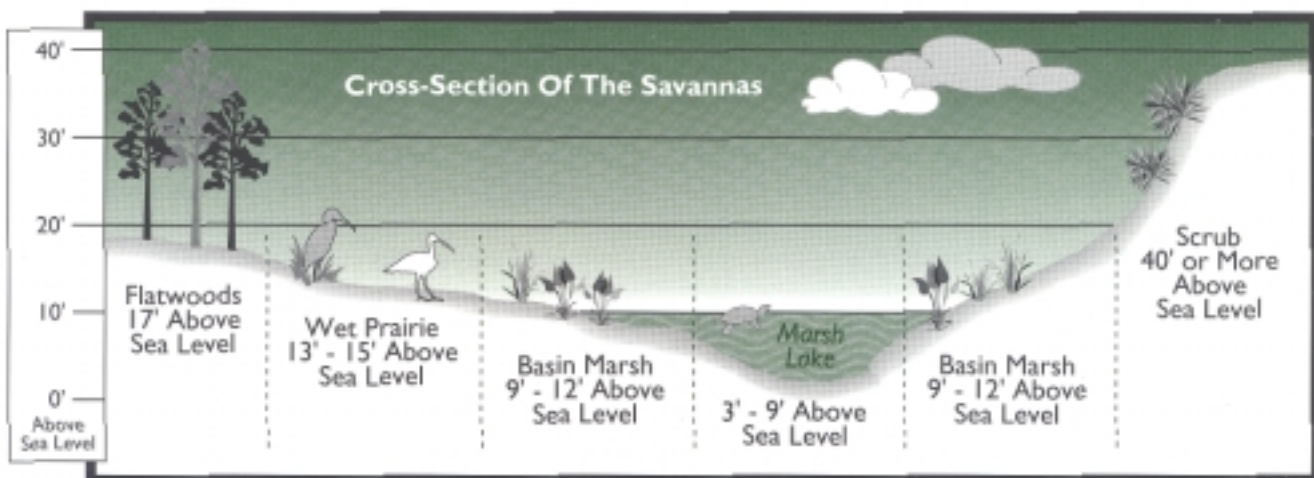
The changing water levels are the lifeblood of the Savannas, according to Ranger Bob Przekop of the Department of Environ-

blue heron sweeps across the water.

Here in the Florida Savannas, a special kind of safari also beckons. "It is paradise," Przekop said quietly, so as not to disturb the woodstorks, eagles, scrub jays, fox, bobcat, gopher tortoises, and of course, those cold-blooded natives, the snakes and alligators. Przekop has been a ranger here for three years, a year less than the eagles who have returned to the Savannas for a fourth year though their nest was completely blown down last year. (There were no fatalities but one adult eagle was taken to the Hobe Sound Wildlife Hospital to have his wing



Wading birds enjoy a banner year in the wet prairie.



Though only 10 1/2 miles long and one mile wide, the Savannas support six distinct biological communities. Perhaps nowhere else in Florida do so many wildlife habitats hang in balance, packed so closely together, all so vulnerable to the pressures of the state's population boom.

the 1920s. Cuban pineapples which ripened earlier than the Florida fruit began to flood the northern markets and finally led to the demise of the state's pineapple bonanza.

All was not lost. Years later, gradually, the sand ridge was allowed to do what nature intended — drink in the rainwater and drain into the marsh below.

mental Protection (DEP). About once each decade, (as recently as three years ago) the marsh dries up completely, killing some plants and animals and making room for others. "This year, we are 30 inches above normal which is excellent for the Savannas," Przekop said. "More water means a banner year for fish and for birds." As if on cue, a great

patched. In a few weeks, he was released back into the wild, with wing and dignity intact.)

In 1978, the state recognized the property's unique features and granted the Savannas reserve status under the Environmental Endangered Lands program. Since then, the DEP has acquired approximately 4,700 acres under the Con-

What Can Be Found In The Savannas

BIOLOGICAL COMMUNITY	GENERAL DESCRIPTION	TYPICAL PLANTS	TYPICAL ANIMALS
Pine Flatwoods	Located mostly in the western Savannas. Characterized by slash pines with understory. Dense ground cover of shrubs and herbs.	Saw palmetto, slash pine, wiregrass	Gray fox, bobcat, raccoon, gopher tortoise
Wet Prairie	Encircles the marshes and lakes. Characterized as a wet, treeless plain with sparse to dense ground cover.	Grasses, sundews, marsh pinks, polygala	Marsh rabbit, roseate spoonbill, sandhill crane, wood stork
Marsh	Water is at least one to three feet deep. Characterized as a shrubby wetland in a large basin.	Sawgrass, sedges, St. Johns wort	Alligator, great blue heron, bald eagle
Lake	Open water zones in the main marsh; small in comparison to surrounding marsh.	Arrowhead, water lilies, bladderworts	Banded water snake, bass, alligator
Scrub	Located in eastern Savannas. Forest of sand pines with vast thickets of shrubs dominating the understory. Ground cover sparse, mostly lichens. Patches of barren sand common.	Scrub oaks, scrub hickory, sand pine	Gopher tortoise, cottontail, scrub jay, raccoon
Scrubby Flatwoods	Scrubby flatwoods are forests of scattered pines with a sparse shrubby understory and sparse ground cover. Scrubby flatwoods grow on dry sandy soils with a fairly shallow water table.	Slash pine, scrub oaks, wiregrass	Scrub lizard, bobcat, scrub jay

ervation and Recreation Lands (CARL) program. The Division of State Lands (within DEP) manages the property as the Savannas State Reserve with the cooperation of many agencies. Major objectives for management are to maintain the natural hydrological regime of the freshwater marsh, protect the plant communities and associated wildlife, and preserve the historical sites. In an effort to buffer the Savannas from encroaching development as well as runoff and deep-well pumping that comes with development, more land has been purchased recent years.

The South Florida Water Management District purchased 77 acres known as the "Spices" as part of the Save Our Rivers program. Only 1,200 acres are left to complete the Savannas purchase. (The South Florida district and DEP would cooperate in acquisition.) Preserving the remnant Savannas came just in the

nick of time — just beyond the perimeter lies the bustling town of Port St. Lucie, recently reported to be one of the fastest growing areas in the state.


The high, dry ground atop the Savannas vista is very enticing to Florida developers. But it is already inhabited. Flora and fauna on the upland ridge have adapted to the dry, wind-blown conditions that are part of life in that habitat, called scrub. Ninety percent of the scrub left in St. Lucie County occurs around the Savannas. Many of the animals that live in this type of environment, such as the Florida scrub jay, a threatened species, can survive nowhere else. The indigo snake, also considered threatened, shares the tortoise hole. The fragrant woolly cactus is a rare plant found almost nowhere else but in the Savannas.

The Savannas is not all marsh and sandy ridge. There are two natural deep

lakes, Eden Lake and Henderson Pond, where there have been boastful reports of bass weighing 12 to 15 pounds. Then there is the legend of the mammoth bass weighing as much as 20 pounds. Oldtimers say at least three people have fought with the wily creature and lost.

For the more passive visitor, recreation includes interpretive one- and two-mile hiking trips and 1 1/2- to 2-hour canoeing trips (the canoes and life jackets are provided). A very active and coordinated group of Reserve volunteers do 90 percent of the interpretive work. The educational component includes a Savannas workbook which targets sixth graders (funded by a South Florida Water Management District grant). The classroom study is followed by a trip to the Savannas. Teacher workshops are also held onsite.

The Savannas that is Florida's cannot boast lions

or wildebeests, but the great eagle still soars over an ecosystem, though not as expansive, that flourished for thousands of years. The same hydrologic cycle which fed the system then, feeds the Savannas today. The white-crowned ruler of this savanna glides towards a nest-on-high to waiting fledglings. And within the Florida Savannas (as on the Serengeti Plains), a rich, diverse circle of life continues. 

For more information about the Savannas or if you are interested in becoming a Savannas State Reserve Volunteer, call or write the Savannas State Reserve, 9551 Gumbo Limbo Lane, Jensen Beach, Florida 34957 (561) 340-7530.